SF-E100 cell cleaning procedure

The following procedure outlines the approved method for cleaning the SF-E100 syringe and observation cell assembly, and should be done as needed to maintain stable data for your SF-E100. In particular, if you observe erratic, irreproducible data it could be due to a plugged mixer, and can be remedied by following this cleaning procedure.

Materials needed:

- Deionized (DI) Water
- 2N NaOH solution
- 2N HCL solution
- Leur Lock syringes to load solutions
- Breaker for waste solutions

Warnings:

- Observe all regulations regarding the storage and disposal of hazardous materials.
- Always use appropriate safety precautions for handling of Acids and Bases to prevent injury.

Procedure:

1. Flush drive syringes with DI Water.
   a. With the syringe control valves in the LOAD position fill both drive syringes with DI water.
   b. Turn the dump syringe valve to the FLUSH position.
   c. Turn syringe valves to FIRE position.
   d. Manually drive the DI water through the cell and into the waste syringe.
   e. Close the dump syringe valve and empty the waste syringe.
2. Flush system with 2N NaOH solution.
   a. With the syringe control valves in the LOAD position fill both drive syringes with the 2N NaOH solution.
   b. Turn the dump syringe valve to the FLUSH position.
   c. Turn syringe valves to FIRE position.
   d. Manually drive the NaOH solution through the cell and into the waste syringe.
   e. Allow solution to soak for 5-10 minutes.
   f. Close the dump syringe valve and empty the waste syringe.
3. Flush with DI water (see step 1) three times.
4. Flush system with 2N HCL solution.
   a. With the syringe control valves in the LOAD position fill both drive syringes with the 2N HCL solution.
   b. Turn the dump syringe valve to the FLUSH position.
   c. Turn syringe valves to FIRE position.
   d. Manually drive the HCL solution through the cell and into the waste syringe.
   e. Allow solution to soak for 5-10 minutes.
   f. Close the dump syringe valve and empty the waste syringe.
5. Flush with DI water (see step 1) three times.